

I shall write a note to Dr. Gray
and send it by the same mail that
takes this so that there can be no
mistake about my request reaching
one or both of the gentlemen from
whom I am conscious I am asking
a very great favor.

Very respectfully yours
John Macoun.

Belleville, Canada

Aug. 12th 1876.

Sereno Watson Esq.

Dear Sir,

During the years
1872 & 1875 I collected plants all
the way from Lake Superior
to the Pacific, crossing the Rockies
about Latitude 56° by the Peace
River and reaching the coast
at the Mouth of the Fraser.

I have been en-
gaged for some time working
up these collections and would
like very much to have the privilege
of comparing my specimens with
those in Dr. Gray's Herbarium.

Should the liberty be
given I shall go down to Harvard
towards the end of this month.
(over)

Origanum clinopodioides, Walt. Poir. in Lam.
Ulmus Americana, L. 611 (96) Dict. 4.609
pubescens, Walt. 611

Orobancha americana, L. 622 ?
virginiana, L. } 623
uniflora, L. }

Oreocentrum aquaticum, L. 627

Urtica pumila, L. Lam. Dict. 4.638

cylindrica, L. " 639

divaricata, L. " 643

Canadensis, L. " "

filiferosus, Walt. " 646

Osmunda virginiana, Sarigny, in Lam. Dict. 4.649

bitermista, " " 650

regalis, L. " " 654

Claytoniana, L. " " 655

cinnaomoma, L. " " 656

Caroliniana, Walt. " " 658

Gaultheria procumbens, L. " " 716

Panexarium Carolinianum, L. " " 732

Trillium cernuum, L. Poir. Dict. V. 19

erectum, L. " } 20

sessile, L. " }

Rumex paniculoides, L. Poir. Dict. 5.61

obscillatus, L. 5.70

Britannica, L. " var. a.

Pedicularis cupressoides, Willd. Poir. Dict. 5.125

virginica, Poir. Dict. 5.126

Canadensis, L. " 132

groenlandica, Rth. " 132

Populus Canadensis, Poir. Dict. 5.236.

heterophylla, L. " 237

angulata

balsamifera, L. " 239.

monilifera, L. " }

laevigata, Ait. " }

Phacelia pubescens, Less. " 240. ?

Phalangium virgatum, Poir. " 246.

Phlox paniculata, L. Poir. Dict. 5.281. Lam. Ill

undulata, Ait. " "

maculata, L. " "

Phlox Caroliniana, L. Poir. Dict. 5.282.

glaberrima

divaricata, L. " 283

ovata, L. " }

villosa, L. " 284.

subulata, L. " }

setacea, L. " 285

knaveolens, Ait. " "

Phryma leptostachya, L. " 285

Phytolacca decandra, L. " 306.

Pinus Mugho, var. A-D. " 336

Hudsonia, Poir. " 339

resinosa, Ait. " }

virginiana (inops, Ait.) }

Taxa ovata A-D. " 340

palustris, Ait. " 341

strobilus, L. " }

glabra, Walt. " 342

aquasosa, Walt. " }

lutea, Walt. " }

Plantago cordata, Lam. Ill. 1.338, N. 1649, Poir. Dict. 5.369

ovellata, Lam. Ill. 1.339, N. 1654, " 370

virginica, L. var. A. " 1556 374

interrupta, Poir. (aphaniflora, Lx) 375

aristata, Lx. 394

Diospyros virginiana, L. Poir. Dict. 5.4287

Platanus occidentalis, L. " 438

Polemonium reptans, L. " 479 Lam. Ill. 472

tuberosum, L. " 480 5106, f. 2

Polypodium virginianum, L. " 515

lonchitis, L. " 526

achrostichoides, Poir. " 529

reptans " 530 pp?

radicans, Poir. " 530

cicutarium, L. " 534

compressum, Lx. " 535

bulbiferum, L. " 536

marginalis, L. " 545

alleganense, Poir. " 545 (Hb. Thelyp. Mx.)

borledosacae, L. " 546

cristatum, L. " "

filipiforme, L. " 548

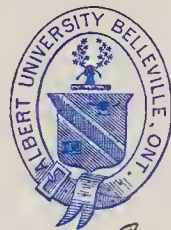
var. ? (Hb. Thelyp. Mx.)

have made a very interesting collection, of the species peculiar to the arid country.

Two species of Cactus, Large Bush and Synosium were abundant and no farming could be done without irrigation. Artemisia frigida was the winter pasture in many places and the notes "bush grass" of various species was fast disappearing before the influx of Cattle and horses.

I will be delighted to answer any questions you may ask if in my power and as soon as possible I propose sending you a complete set of our Canadian plants as far as my collections will allow.

Very truly yours
John Macoun.



Nov. 17th 1877

My dear Sir,

Having been absent from home when your letter reached Belleville I had not the pleasure of seeing it until a few days since. I am glad that you think my Report interesting. When I asked Mr. Selwyn to send you a copy I hoped you might find something would interest you.

I send you the cones of the two which I took to be the Abies alba. I am also sending the leaves in this letter.

The tree was found in some abundance at Quenelle on the Fraser and also at a point west of that on the Selkoph Trail.

The *A. balsamea* was not observed by me west of the mountains and from the following fact it is very probable that your surmise is correct.

In September 1872 when crossing a range of low mountains about 30 miles south of Little Slave Lake at an altitude of between 3000 and 4000 feet. (aneroid was about 26) I noticed that we came upon *A. balsamea*, for the first ^{time} since leaving it east of the great prairies. I was struck by its change of habitat and never felt satisfied about it

until I read your letter. I also detected *P. contorta* on the same mountains which is its eastern limit as far as I am aware.

I am not exactly certain whether you mean that there are three ranges of mountains in Washington Territory and two in British Columbia or not but if such is your meaning I think you are correct, only ~~at~~ two being in British Columbia. The Coast Range of W. Territory seems to continue as a chain of mountains on Vancouver Island.

The dry woodless region of my Report lies immediately east of the Cascade Range, and the whole country below 2000 feet from the Boundary Line to about Lat. 52.40 is woodless. Hemlocks a little south of Lat. 51° being in the centre of the area. Had my time permitted I could

man from the western part of
this province made me a visit.
In the course of his remarks he
mentioned that he had found *E.*
candidum this past summer.
When I objected he described the
plant which I take to be *E. propullans*.
I remember having seen a figure
of the latter some years ago and the
figure he drew was exactly like
it. He says that the flowers have a
tinge of pink.

I find that the Liliaceae
were not sent. I shall send them
with others next week. The Rainy
River plant *L. canadense*? will be
among them. The Onion we ex-
amine which I was at Harvard turns
out as you thought - *A. cernuum*. A
few of the bulbs after 2 years produce
flowers.

Belleville Ont.

Nov. 16th 1878

My dear Sir.

Your card was duly received
some days since. The parcel you
refer to was sent by me to
Dr. Gray at the time you mention.
They were, if I remember aright,
my difficulties and included
Lake Superior and Ontario
plants. As I never heard any-
thing of them I gave up asking
for assistance, from Dr. Gray.
I see now that they may have
been put aside for future ex-
amination, and lost sight of.
If convenient I would like a
list of their names. From the
names I can tell the localities.

Some days since a gentle-

I obtained it on Vancouver
Island.

Please forward your work
on Synonyms and its price. I shall
at once send the money.

Very sincerely yours
John Macoun.

- 2716 *Hyp. Mulleri* Schp
 2722 *H. oedipodium* M
 2723 *H. anemum* M
 2732 *H. plicatile* M
 2733 *H. plumifer* M
 2740 *H. radionum* M
 2746 *H. Richardsoni* M
 2767 *H. subserpentes* Desz
 2779 *H. Vaucheri* *Distin*
 2781 *H. vacillans* Sullw
 2782 *H. varium* Hedw

Please send the list of species
 you desire, and I shall send
 the specimens if I have them.

Where can I obtain
 a list of the Pacific Coast
 Mosses, *Lesqueriaux's*.

Very truly yours
 John Macoun.

- No. 2373 *Sphagnum nodosum* 2546 *Brachyotum*
 2388 *Dicranum crispum* Hedw 2579 *Andropogon*
 2398 — *macounii* Aust 2594 *Embryonum*
 2480 *Barbula anomala* B. & 2595 *Alnus* *Hortens*
 2486 — *gracilis* Schw 2606 *Splachnoides*
 2439 — *rubiginosa* Mitt 2616 *Fontinalis* *typica* Hedw
 2440 — *flavifolia* Hedw 2628 *Leuc. Mollis* Hedw
 2458 *Anacamptis latifolia* R. & H 2639 *Pylais. heteromalla*
 2464 *Enallagma macounii* Aust 2644 *Nick. Thacourii*
 2465 — *Scleroparia* Aust 2647 *Myrica* *fulva* Hedw
 2470 *Orth. pallens* Hedw 2651 *Onalix obtusa* Mitt
 2474 — *Jamesonii* Sullw 2659 *Hyp. aggregatum* M
 2501 *Trimmia alpestris* Schp 2663 *H. alpicola* Hedw
 2507 — *troquetii* Aust 2664 *H. Arcticum* Hedw
 2508 — *magioproducta* Hedw 2665 *H. asperum* M
 2524 *Stichum parvum* Hedw 2686 *H. declivum* M
 2487 *Orth. Bruchii* Wils 2693 *H. Flemingii* Aust
 2526 *Oligot. aligerum* Hedw 2695 *H. geminum* Mitt
 2529 — *Snallii* Mitt 2696 *H. Sherbie* Hedw
 2538 *Timothia Bavarica* Hedw 2700 *H. heterophyllum* Hedw

Belleville

Nov. 35th 1873

Prof. J. P. James.

My dear Sir,

Accept my thanks
 for the remittance received.
 I am sorry that there are so
 many mistakes in spelling
 in the Catalogue. I shall do
 better next time.

I purpose sending
 to you the remaining species of
 mosses not before sent to you
 and shall do so very soon
 as I am about to send a parcel
 to Dr. Gray. You will kindly
 confirm my names or correct.

copy — Cambridge April 10 1879
Prof. J. Maclean

My dear Sir—

I have examined all the Mosses contained in that large package which I received a few weeks ago from you

You will observe by the Enumeration that I report only those that were not named but simply numbered on the packet; also those that were incorrectly named

Those that were properly named I have not reported

I have critically examined all under the microscope with very few exceptions of those which were unmistakably recognised

I am sure of my results

I hope my report will be satisfactory

In your favor of Nov. 25 you asked me to send a list of species that I desired and you would send me specimens if you had them

I have now to thank you for a number of those contained in my list of desiderata which are in the large packet reported upon

viz— Nos. 2599—2594—2639—2644—2647

2651—2664—2693—2696—2723—2732

2746—2767—2733—

Now there are on that list which I furnished others which I would be under obligation to you for if only in small example, — several of the list I have not seen

Very respectfully & truly yours

Wm. J. James

peninsula which extends between
the Georgian Bay and Lake Huron.
They were all collected the last
week in July and first week in
August 1871. *Epilobium paniculatum*
was in abundance but has never
been seen in any other locality.

I have sent the Fort Francis
L. canadense.

You will find a parcel ad-
dressed to Prof. James. It contains
mosses which he will call for
when I hear from him, I shall
send your set.

Please notify me of any
corrections and omissions.

Yours truly
John Macoun.

Bellefleur

Jan 26th 1879

My dear Sir.

I have this day sent
on a parcel of plants addressed
to Dr. Gray. They are another
installment of our Canadian
Flora. I purpose going on
until he has got a full set
of our whole botanical pro-
ductions. Next season I
shall add largely to what
I have already sent and
before winter is at an end I
expect to send the grasses and
sedges and possibly the mosses.

The 60 species of the old set
whose names you sent a few weeks
since were all collected on that

of last season's collections.

All my collections were made
between 51° & 52 North ^{Lat.} and 97
and 115° West Long.

I collected from east to West
the later the date the further west
the locations.

Hoping both Dr. May and
yourself may get some things to
interest you.

I remain yours
John Macoun.

Arden Watson Esq.

Cambridge
Mass.

P. S. Should you have opportunity would
you kindly return the last four species
sent. J. M.

Belleville Feb 4/80

My Dear Sir,

Having spent the summer in
the west as I mentioned in writing
I would do, I now send part of
the proceeds for your examinations
and partly to fill up the gaps in
my Canadian series which I hope to
complete as years pass on.

I send 220 species of my
own and there are all or nearly
all named to the best of my ability.
As you examine would you kindly
put the number always before the
name. thus 160 Geigeria paniculata.
By this means I can correct mistakes
as I have duplicate numbers.

I would like you to look
over them at your earliest convenience
as I am making up a catalogue of

1. Pennell - 11 specimens
2. Scribn. - 1 specimen
3. Michx. - 1 specimen
4. Tuckerm. - 1 specimen
5. Scribn. - 1 specimen
6. Scribn. - 1 specimen
7. " - 1 specimen
8. Scribn. - 1 specimen
9. Scribn. - 1 specimen
10. Scribn. - 1 specimen
11. Scribn. - 1 specimen
12. Scribn. - 1 specimen
13. Scribn. - 1 specimen
14. Scribn. - 1 specimen
15. Scribn. - 1 specimen
16. Scribn. - 1 specimen
17. Scribn. - 1 specimen
18. Scribn. - 1 specimen
19. Scribn. - 1 specimen
20. Scribn. - 1 specimen
21. Scribn. - 1 specimen
22. Scribn. - 1 specimen
23. Scribn. - 1 specimen

Ballville July 26 1880

My Dear Sir,

Accept my very grateful
thanks for the promptness with
which you examined my specimens.
I feel proud of my success last year.
I made very fine collections of grasses
and Carexes also and with the large
stock I have I shall be able to send
you nearly a full set of all our
Grasses and Cyperaceae. I pur-
pose doing this before the winter is past.

I send a small parcel con-
taining a few odds and ends which
you would oblige me by examining.
Those with only a number on the
sheet were obtained in Nevada and
California in April 1875 as I was
going to British Columbia.

I send what we call Aster
Novi-Belgii

The *Epilobium*s are the unnamed ones of 1876.

I would like very much to get the corrections made on the plants I sent formerly as I am desirous of correcting all my mistakes before publishing another edition of it.

Would a collection of mosses certified by Prof. James be acceptable to the *Barbary*. I have very fine collections of *Cryptogams*.

The following numbers you make no report upon.

110 *Calceol* — ? *proserpin*

77 *Arabis* — ? *purpurea*

67 *Solidago* — ? *memoria*

9 *Aster* — ? *alpinus*

Please send a copy of the Botany of California by mail and I shall send price on receipt of it. I am very much pleased with the Revision of the Liliaceae and thank you very much for it. Hoping I am not troubling you too much. I am ever J. MacDougal

are published I would like
to receive a copy of each at an
early date. I will ^{send} return prices
by return mail.

Dr Vasey examined my
prosses and found many interest-
ing things. Dr. James and Prof
Ducharme my Lichens so that
I may say with safety that now
the greater part of my collections
are properly named.

Should I get time this
spring I shall send all the Canes
and prosses found in Canada.

Very sincerely yours
John Macoun.

Ottawa

March 28th 1880

My Dear Sir,

I have been here nearly
a month and now take the
opportunity of thanking you for
your kindness in naming my
plants and giving me the in-
-formation in which I stood
in need. Thanks for the cor-
-rections on the Catalogue. I
am engaged on a complete re-
-vision of it and purpose ^{using} your
Botanical Index and all the
later works and Revisions for
the nomenclature.

When the new works

I shall not cease sending
until I make Dr. Gray's col-
lection of Canadian plants as
nearly complete as possible.

My route this year was
generally about Lat. 50.

I see by the papers that
Dr. Gray has published a
revision of the Compositae.
Could you oblige me with
a copy?

Very truly yours
John Macoun.

Lucas Watson, Esq.

Herbarium,

Harvard

Mass.

Belleville

Dec. 18th 1880

My dear Sir.

I reached home from
my long trip a few weeks
since and am now going
over my collections.

I am putting up
a number for Dr. Gray and
will send them off at once
I send 200 species now and
would be glad if you would
look carefully at those without
a specific name as they are
principally additions to my
collections of former years.

I think you will
find a few to interest you.

Dec 23^d

Maccom

Dec. 12

Dear Sir,

I have opened this
note to say that I send on
for you 322 species or specimens,
This brings me to the end of the
Caries for the present. My next
parcel will include the grass.

I am improving on
you by sending the enclosed
parcels but the charges from
here are too high

I hope you may
be able to find many interest-
ing things. If you choose send
the unnamed Caries to Mr
Booth. Yours respectfully
J. Maccom,

be named. The one by
Prof. James the other, by Dr.
Vasey.

J. H. Allen M.C. of
New York has been working
up my Charas and with
me I have a number of
new species.

At times James I shall
get all these things sent to
you but work species heavily
on me in winter.

As soon as convenient
I would like your opinions
on the new (new to me) plants
I send as I want to embody
them in my report.

I send Post Office Order in this.
Yours truly E. Mearns

Belleville Jan 31/81

My dear Sir,

The books have arrived
and I am delighted with
them. They will be a great
acquisition to me in working
up the botany of the West
coast.

In the package I sent
you are a number of new
things from the Cypress Hills
that are very interesting whether
they be new or not as they
are certainly new north of
Lat 48. In the next package
I send I shall put all the
grasses and mosses - a goodly
number but these will be

and would ask as a favor
that you would look over
the last parcel I sent. There
are only a few species which
require examination as the
larger number of those I sent
are properly named.

Has Prof Gray published
another Volume of the Flora
or have you done anything
yourself the past summer?
Should either of you have
published anything please
send it on and I shall send
the price next mail.

Very truly yours
John Macoun

Belleville

Nov. 23^d 1881

Dear Sir,

Having spent another
summer in the North West
and made still further Col-
lections I propose sending
before spring another instal-
ment of our flora. This time
I shall send the Cyperaceae
and Gramineae and as Mr.
Boott and Mr. Vasey have
carefully gone over these orders
I will not trouble you the
name them.

I am about to reprint
my Catalogue of Canadian
plants and would like to have
all the latest names and species



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn LL.D., F.R.S., Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Belleville Sep. 17 1882

My dear Sir,

I reached home yesterday and found your kind letter of Aug. 2nd and the enclosed list of plants sent in the winter of 1880. I also find the pamphlet you mention. Please accept my grateful acknowledgements for all and several and believe me I am doubly grateful for the names of the plants as I wished you to verify the names I had worked out with such an expense of time and trouble.

As I indicated in my letter written from Perce I have made large collections this season and have many rare things obtained last season and if you were not too busy I would send you in the course of a month another instalment of plants not before sent by me. Many of the British Columbia and Rocky Mountain plants

(See within)

are extremely interesting to me and I hope may be likewise to you and Dr. Gray.

Many of the Gaspé plants are specially interesting as they are rarities in most herbaria. Amongst others I obtained *Legustopteris montana*, *Woodii hyperborea*, *plabelle*, *Aspidium fragrans*, *aculeatum* (two vars) *Filix mas*, *Botrychium Lunariae*. An *Adiantum*, *Arabis alpina*, Numerous *Carex*, *Blyssnum rufum*, *Plantago cornuti*, *Poa* an *Iris* and numbers of others. My collections of Lichens, Mosses, & Liverworts are very large and likely contain many new things. These will be worked up during the winter.

Tell Dr. Gray that I have five specimens of *Armeria* ~~fr~~ *vulgaris* from the top of the Shickshok Mountains at an altitude of nearly 4000 feet and fully 25 miles from the sea. The flora of the White Mountains was reproduced at this point. Very truly yrs. John Munro

P.S. The letter referred to has been sent
back to me. I shall write you further
in a day or two.

Should you be able to look over
a lot of plants I might send them
to you in a week or two.

J. M.



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred. H. C. Selwyn LL.D., F.R.S. Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Dec. 24th 1883

My dear Sir,

Your note with the names
of the plants was duly received
and I am glad to receive your
notes on them. I see you are
right about ^{the specimens sent} ~~Saxifraga~~ not being
steriles. My mind is settled on
these points now.

In a week or two
I shall send down 100 or more
species for the herbarium different
from those I have already sent.
Amongst them will be a few which
I wish you specially to examine

there I shall indicate by name
or number so that you need not
be troubled too much. As our know-
-ledge and specimens increase I shall
keep sending you additions until
you have all our flora.

Wishing you & Mrs. Gray
many happy returns of the Season
I am very truly yours
John Macoun

the square tips to the involucre
scales.

The var a. in Dou & G.
Hera just covers these specimens
and in my humble opinion they
should constitute a var. *Amor-
canum* of *umbellatum* but not
they true species. They are just
the connecting link between the
two species - *umbellatum* & *Canadense*.

I was much puzzled over
the Antennaria having named
it *divica* but discovered that its
characters would not agree with
that species.

Leopards Hills and H. and
Hills are in our Canadian North West.
The former are a range of hills ris-
ing to the height of about 3600 feet in
Lat 50 and Long 107-109. The latter are
in Lat 61+ and Long 112.



GEOLOGICAL & NATURAL HISTORY SURVEY.

Wm. B. C. Selwyn LL.D., F.R.S., Director

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Dec. 8th 1889

My dear Sir,

Your note with list of names
came yesterday for which accept
my thanks.

In your remarks on *Hieracium*
umbellatum you ask my opinion
regarding the distinctive features
of *H. umbellatum* & *Canadense* or
rather our forms.

My decision is that the
specimens sent are not true *um-
bellatum* but are near it than
Canadense.

My specimens are *um-
bellatum* (in my opinion) in every
sense but in one, that is ^{they} ~~it~~ wants

Helianthus Nuttallii was found
in about Lat 62° and Long 111 on
open grassy prairie far east of the
Rocky Mountains.

My most difficult plant
is No 22 which your name *Aureus*
var. In general appearance it is
like this species but its achenia
are hairy which to me is an
exceptional character.

Some time since I sent
you my Catalogue of the ^{Canadian} *Polygones*
which I hope you received.

Very truly yours
John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn B.Sc., F.R.S., Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Dec. 13th 1883

My dear Sir,

I am engaged working up our flora and in my examinations have come across a few things I want your opinion upon.

No I. is a violet I can make nothing satisfactory of. I named it *V. saemundia* but as it is stemless it cannot be that species. We have no yellow stemless violet that I am acquainted with and therefore I send it you. It grows in cool woods along the western base of the Rocky Mountains as

the specimen sent is from near the Boundary but I found it 400 miles farther north.

No II is a violet which I call *V. Nuttallii* but it is from the top of the Rocky Mountains at an altitude of over 6000 feet.

No III is the species of *Heptameris* I call *H. calycanthra* in my catalogue which I sent to you some time since. I have it from a number of localities and am still in much doubt of it.

No IV is another *Heptameris* which puzzles me. I few scraps of it were collected on the summit of the North Hoosancy Pass the past summer and I have been unable to place it anywhere except make.

it *crispa* which I am afraid
is scarcely correct.

I find also that many
specimens of *Viola cucullata* have
ciliate sepals and in the same
connection pubescent petioles as
predicted. Specimens of *Viola cordata*
have these characters. What do you
call this form?

Dr. Rogers and myself
are thankful to you for your
trouble with our Nova Scotia plants.
The specimens you name *primines*
are truly indigenous as I found
it everywhere in Nova Scotia
and also along the Gaspé Coast.
I find the specimens accord exactly
with the figure in the English
Botany.

I am not so certain

that *Alchemilla vulgaris* is
indigenous but believe it to be so
as I found it in three places
close to the coast.

In May 1875 I obtained
specimens of a plant near Victoria
on Vancouver Island which I named
Deloskoea uliginosa, Muhl. I now
find it to be a *Limnanthes* and
name it *L. Douglasii*.

No 30 of my catalogue includes
two species. The Western reference
being applicable to the true *Ranunculus*
flammula.

Any changes I make in
the Catalogue I shall inform you
of so that you may know how
matters stand on this side. Any opinion
you may wish to see let me know
and I will send them. Very truly
yours
J. W. Mearns



GEOLOGICAL & NATURAL HISTORY SURVEY.

Wm. R. C. Selwyn LL.D., F.R.S., Director

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Feb. 18th

1884

My Dear Sir,

Accept my thanks for your late article regarding botanical nomenclature and believe me nothing causes so much perplexity to men like myself more than the incessant change of name and too often without any just reason.

Today I forward by Express a packet of plants containing over one hundred species. The greater part of them are Polyprotates but there are one or two I would like you to look particularly at - *Galium asperiverrum*? and *Lonicera hullivantii*? beside *Galium Hammettanicum*. Amongst the Polyprotates there is an *Arabis* from Anticosti which

I cannot place and a number of Umbellifers from the Rocky Mountains.

None of the plants sent are without names except two and are intended as another installment of the Canadian flora for your herbarium. Later on I shall ^{send} another hundred and next season I hope to send many others.

I have been much puzzled over *Solidago stricta* = *virginica*. It is described as being glabrous but our specimens are nearly all as scabrous and hairy on the pedicels as *speciosa*. I am tempted to think that our form is principally *speciosa* or an undescribed form. Please take a look at my Anticosti specimen sent you some time since.

I am busy at my Catalogue of the Carnivoratae and have had a hard

therefore from the very localities
where Pursh collected so many
years ago.

Very truly yours
John Marston
Care of Asa Gray
Cambridge
Mass.

time with them. I have enumerated fifty three species and may have included some forms which you in your new revision may exclude.

The names attached to the specimens sent correspond to the names in my catalogue. You will notice that the greater number are from Nova Scotia and the Gulf. *Alchemilla vulgaris* and *Stellaria praeinnata* are very likely both indigenous to Nova Scotia - certainly the latter.

It is worthy of note that the Light House Keeper at South West Point, Anticosti found "*F. Purshii*" cut on an old spruce. He mentioned the circumstance to the Abbe Bruneau some years ago but I do not believe the latter ever said anything about it.

The specimens sent are



GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn B.L.D., F.R.S., Director.
MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Feb. 18th 1884

My dear Sir,

I send another installment of specimens to the herbarium by today's Express. They are all named but one or two but I would like you to glance your eye over them especially the Umbellifers which are chiefly from the Rocky Mountains. There is also an *Arabis* from Anticosti which I would like you to examine. It is not rare on gravel. Please look particularly at the *Arabis* from Anticosti and *Archangelica atropurpurea*.

In the course of a month I shall send another hundred or more.

Any corrections you may make can be made by number as I have duplicates of all I send. I hope my Anticosti plants may interest you.

I am writing another part of my Catalogue and hope to have it distributed before June.

Very truly yours
John Macoun

Levan Watson Esq.

Herbarium

Cambridge

Mass.



GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn L.L.D., F.R.S., Director.
MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

April 1st 1884

My dear Sir,

Accept my thanks for your kindness in sending the corrections and notes on the species sent.

Ranunculus abortivus is described as glabrous and I am puzzled to draw the line between it and the var. All our specimens are more or less hairy.

I am glad to find that all our specimens of *Geranium* ^{Freemontii} are to become *incisum*. I had reached that point myself this winter.

Would you kindly take another look at No 63 I cannot believe that it is *Hedysarum Mackenzii* as it is so unlike all other specimens I have of that species. I call it *Astragalus Mortonii* because it seems near *A. Canadensis*.

Pinus aucuparia if from Lake Winnipegosis is certainly indigenous as it grows in abundance on islands in Lake Winnipegosis and no settlement has ever been within 150 miles of where it is growing. Many of the trees are quite old decaying and the one from which the speci-

-mens were procured was over twelve inches in diameter.

120
60+
30
90+
You may notice that Bourgeau says he found it on the
Winnipeg River which is 200 miles farther east. My opinion
is that we in Canada have three species of this section of
Pinus and that the eastern one is *Americana*, the one ranging
from Lake Superior or even farther east in Lat 45° is
one intermediate between it and *sambucifolia*, say
acutaria. I purpose settling this matter the coming
summer.

You say that No 97 is *Galium Aparine* V. *Vanillanthi*.
Do you not mean No 95?

If I have time I shall send you another
hundred species during the coming month of course they
will all be named so that you may perceive what
I make of them. By the first of May I shall have the
second part of my catalogue written, which will include
the *Garnopetalae*.

Since I wrote last I find that we have *Stellaria*
franchetii growing here and in 1882 I found it abundant
along the Gaspé coast. The more I know of our flora the
more I am satisfied that we have numerous forms not
found south of Lat. 45°. When I reach the Caries and

the lower forms I will astonish you.

Last August I found *Phegopteris calcarata* in abundance on Anticosti and *Carex ampullacea*, *rotundata*, *fulva*, *rariflora* and many others You will see by the Botanical Gazette what I did in Nova Scotia.

As my whole time is now devoted to Botany I shall soon have a complete collection ^{own} of a flora and be able to compare the various forms in the north with the southern ones

You will oblige me much by taking another look at Nos 102, 63, 97 or 95

Very truly yours
John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn LL.D., F.R.S., Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

April 17th 1884

My dear Sir,

Your note was received a few days since and gave me much satisfaction.

During the coming summer it is possible our son will be in the Rocky Mountains and should he be you may expect good specimens of *Angelica Dawsoni*.

I hope with your assistance and Dr. Gray's to get our botany in proper shape in the course of a few years and as I work the ground over I purpose doing it so thoroughly

that all additional work will be added to the general stock without having to go over the same ground again.

I shall make ^a closer examination into our species of *Pinus* the coming summer and hope to send you good specimens of all our forms next autumn.

Very truly yours
John Macmillan



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn, L.L.D., F.R.S., Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

April 24th 1884.

My dear Sir,

Your note has just reached me and I answer it at once.

Vericaria Arctica was found growing in some abundance on gravel and sand, left by the spring floods at the mouth of Jupiter River Anticosti on the 17th of last August by myself.

Please accept my thanks for your kind note regarding the plants I asked you to look at again. I am glad that at least one of them is new. In a few days I

I shall send you another hundred species but I presume naming them all and shall in a note let you know those to which I wish more particularly to direct your attention.

The coming summer I shall be collecting north of Lake Superior and around Lake Nipissing and hope to find some fine plants but nothing new.

During the summer of 1885 I hope to be in the Rocky Mountains and shall get you good specimens of those species I have been sending you scraps of collected by Mr. Dawson.

In the preface to ~~my~~ the second part of my catalogue which is now going through the press

I have particularly mentioned
the assistance which I have got
for so many years from your-
self and Ch. Gray. This should
have appeared in the preface to the
first part but was unintentionally
omitted.

We have had more cloud
here this part winter than for many
years but our skies are generally
clear. For the last month we have
had almost constant sunshine.
Four weeks ago we had an average
depth of 4 feet of snow on the
ground and now the elms are in
flower. Today I received a letter
from the Canadian North West
is Lat 53°, containing flowers of the
Anemone patens collected on the 18th
of April. Spring is earlier than
here is Lat 46°.

I send a copy of my
notes on Canadian *Polyseta*.
What do you think of it.

Very truly yours
John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn LL.D., F.R.S., Director
MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Aug 26th 1884

My dear Sir,

I have just returned from Lake Superior and delighted to find on my table the new Manual of the Moss flora of North America.

Please accept my grateful thanks for your kindness and believe me when I say that I fully appreciate it. During the coming winter I propose sending a set of our mosses to the herbarium and shall be pleased to send you a set as well if you are having a separate collection. I have about 500 species.

During the summer I have made a careful examination of the country north of Lake Superior and Lake Nipigon and my son is collecting on the Cypress Hills and Lake Winnipeg so that you may expect many additional things from me this winter. The second Part of my Catalogue is now going through the press.

P. S. I leave in a few lines
for Montreal.

Very truly yours
John Macoun

Maecum



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn LL.D., F.R.S., Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Nov. 4th 1884.

My dear Sir.

I have just put up my instalment of the *Pl-
-yptata* for this year and send them all named
and numbered as they are in my new catalogue
of which I send you a copy with the parcel.

Any specimens amongst them to which I
wish to draw your special attention I shall note
here.

No. 1 *Chernia verticillaris* from the Cypress Hills
is certainly not our eastern form. What is the diff.?

No 97 *Ruphus luteum*, Smith. We have this now
from a number of places from the Atlantic to Lake
Manitoba.
— N. Kalmian

No 105 *Disymbium incisum* & *S. canescens*

No 116 *Plantaginifolia*. (Introduced)

No 113 *Fernaria officinalis*. I think this another species.

No 241 *Viola canina* var. *rustica*. Please examine.

No. 284 *Arenaria Michauxii*. Look at the small speci-
men which is from Point Pelee where Douglas found
A. juniperina, many years ago.

- No 265 *Lychnis elata*, Watson. = *Silene multicaulis* ?
 No 170 var = *Oraba stettaria* var. *Johannis*.
 No 138 *Arabis Lyallii*, Watson. = *A. Holboellii*.
 No 295 var. *Stettaria borealis* var. *alpestris*. = *S. longipes*.
 No. 528 *Oxytropis monticola*, Gray. New Species. = *O. Lamberti*.
 No 571 *Prunus Pennsylvanica*. Look at the Western specimens.
 See leaves on same branch with flowers.

- No. 662 Var. *Rosa blanda* var. *setigera* = *R. Siegt*.
 " 663 *Rosa acicularis* v. *Bougeana* = *R. Arkansana*.
 " 674 *Pinus Americana*. Are both specimens the same?
 " 680 *Crataegus subvillosa*
 " 682 " *Douglasii* } Please examine
 " 683 " *viridaris* }

Look at all the *Laxifragaceae*.

- No. 794 *Epilobium palustre*. Very doubtful of this.
 No 878^b *Pencedanum villosum* This is the same as 90 of last year.
 What do you make of 93, 94, 25 of last year?

I have put in four species on top of the pressed herbs
 Dr. Dawson found in the Rocky Mountains this year.
 Please look at them and see if correct. One is an
Astragalus without a name. I have sent in all
 96 species, nearly all of which are in quantity
 and in good condition. I send them to Mr. Leach
 to be forwarded from Wilmington. As soon as I can
 I shall make up the *Garnipetalae*.

I send the Catalogue
 by post

Very truly yours
 John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn LL.D., F.R.S., Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Feb. 7th 1885

My dear Sir,

A day or two since I had the pleasure of receiving your latest contribution to the botany of North America. Your collectors are showing wonderful activity and are finding many new things. I am plodding on here and trying to get our plants into some order and I believe am making good progress. We are registering every species and all the mistakes I make can be easily corrected in future publications.

We are putting up another package for you but in advance I send a few *Crabas* from Hudson Strait and an *Arenaria* which I would like to have your opinion as to what it is. The genus is now in the press.

You will get many fine Arctic plants when I send the parcel.

Please accept my thanks for the late publications and believe me to be as ever your diligent pupil.

John Macoun.

P. S. As I have no Canadian helpers I take in the whole flora and am as well up in Lichens, Mosses and Liverworts as I am in *Phenaganes*. You will be astonished when you see my Catalogue of our lower forms.

J. M.



GEOLOGICAL & NATURAL HISTORY SURVEY.

Wm. R. C. Selwyn LL.D., F.R.S. Director.

MUSEUM & OFFICE, SUSSEX ST OTTAWA.

May 29th 1885

My dear Sir,

This morning, I found on my table, your notice of ~~the~~ second part of my Catalogue. The first paragraph is everything I could wish as the criticisms are just and proper but the second shows that politically you are far behind as the terms Upper and Lower as applied to Ontario and Quebec have not been heard on this side of the 45th Parallel for over 20 years.

Our whole country has been known as the Dominion of Canada since 1866 and for me to change the title would be considered a breach of official duty. When I used the term "Canadian" I did it in the ^{sense} ~~way~~ it is understood here. Each section of our country is a province - Ontario for Upper Canada and Quebec for Lower Canada. The Nova Scotians and British Columbians consider

themselves as much Canadians as we do
in Ontario.

You will see that the militia from
all parts of Canada have just wiped out a
rebellion of halfbreeds and Indians in the
North West and each man of the 5000 now at the
front calls himself a Canadian just as you call
yourself an American. Our new name is the
Dominion of Canada and we are Canadians from
the Atlantic to the Pacific.

I am glad to feel that you are home
again and I hope benefited by your trip. I start
in the course of a week for the Rocky Mountains
and purpose making a botanical section of the
country from the eastern base of the Mountains
to and beyond the Columbia River and hope to
add much to our knowledge of the mountain
flora both as regards distributions and species.

Thanking you again for your
kindly notice and hoping to send you many
additions to our flora next fall

I am Dear Sir,

Very sincerely yours
John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY.
Wm. B. C. Tilgner D.D., F.R.S., Director.
MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

June 3^d 1885

My dear Sir,

I start in the morning for the Rocky Mountains and shall be absent over three months.

Should you look over the plants before I come back you might hold over your corrections until I return. This is my first collecting trip to the mountains and therefore you may expect to see many rarities on my return.

If there are any particular things you desire me to look after write me at Calgary, Alberta, Canada. This will be my address all summer. I collect all kind of plants so that my work will not extend over a great district but I shall collect from the foothills on the east to the dry regions of British Columbia on the west and of course on all the high mountains on the line of the C.P.R.

The foregoing programme I shall carry
out if health permit and already predicate
interesting results regarding the range of species.

Hoping you have had a pleasant
Vacation and are enjoying good health

I remain yours very truly

John Macom.



GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn B.L.D., F.R.S., Director.
MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Nov. 3^d 1885

My dear Professor.

As I mentioned in spring, I passed last summer in the Rocky Mountains and collected from the eastern Foothills to the summit of the Selkirk mountains within the "Great Bend" of the Columbia. My collecting ground was on both sides of the Pacific Railway and on an average about Lat. 51°.

My collections are simply immense and mostly in fruit and flower.

I am at work on the collection and find many interesting things besides a few I am in doubt about. I send a few of my finds which are rather obscure and would like your opinion about. The Crucifer without a name is an introduction along the line of Railway in the mountains. I can make nothing of it.

If you can examine what I now send you will confer a favor on me as I am anxious to get the name of the Crucifer.

(over)

Very truly yours

John Macoun.

List of rarities

- 1 *Anemone Canadensis*, Watson
- 2 " *occidentalis*, Watson
- 3 *Delphinium Menziesii*, Ol.
- 4 " *variegatum*, Dougl. & Gr.
- 5 *Thalictrum occidentale*, Gray.
- 6 *Leathea leptocarpa*,
- 7 *Aquilegia brevistylis*, Hook.
- 8 *Arabis petraea* var. *ambigua*, Ryd.
- 9 " *Lyallii*, Watson
- 10 *Oreaba crassifolia*, Graham.
- 11 *Viola Selkirkii*, Goldie.
- 12 *Lysichiton elata*, Watson.
- 13 *Stellaria obtusa* Engelm. ? = *S. humifusa*
- 14 " *crispa*, Cham. & Schlecht.
- 15 *Arenaria stricta*, Watson, ? = *A. biflora*
- 16 *Calaytonia leucostemmatum* var. *sessilifolia*
- 17 " *megarrhiza*, Pang.

I will send you any of these you may desire besides any others I have.

J. M.



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn LL.D., F.R.S., Director

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Nov. 10th 1885

My dear Sir,

Your notes and the Catalogue have both reached me and have given great satisfaction. I am delighted to learn that Dr. Gray has taken up the *Polypetalae* for I assure you the mountain species need much revision. I made very fine specimens this year and as I have nearly all in both fruit and flower I can send specimens easily determinable. We are putting up a set of all the *Polypetalae* not sent before this. These will be chiefly from the Rocky Mountains and Hudson Bay. I am now working at the Saxifragaceae and as soon as I am through the *Polypetalae* I will send off

all the additions for this year.

Thanks for the notes in the Catalogue they are all proper I am quite sure as I have discovered some of the mistakes myself.

My Should you or Dr. Gray wish it I will send you down a copy of the Catalogue with the changes and additions written in so that you may know exactly how far our present knowledge extends. I know now that many of the species are not so limited in their range as I have made them. I will send down a couple more Catalogues but retain the one you send back.

I could make nothing of the *Neslia*. It is very curious that no specimens have ever been seen since Bourgeau's time until this year. My specimens are from the Columbia Valley and Rocky Mountains, but the seeds must have been brought in by the railway.

Lanson knows nothing about it.

our plants and could give nothing new but a re-hash of his old paper was necessary to keep him still before a certain class.

I have many fine specimens of what I named *Ranunculus rivialis* var. *Eschschottzii* and will send fine ones to you. I am surprised about *Thalictrum Cornuti* and will send you a specimen of what I call the genuine article. I cannot conceive where I got the note about *A. flavescens* as it certainly is not my own knowledge I introduced. I have lovely specimens of *A. brevistylis* from the mountains. I never saw *A. Coerulea* and hence cannot understand how I introduced the remark.

I had already found out my mistake about *P. azureum* which I was led into by accepting other statements. On examinations of my Rocky Mountain gatherings I found out my mistake

We have made a fine collection of roses this year. I have put a specimen of each form for you. I have three forms of *Californica* from British Columbia. *P. Woodsii* will likely be my *P. parviflora* from Bully Pine. I have gone over my roses again with the aid of your divisions and find *P. lucida* is largely my *Carolina* but I also find that both species range from the Coast to Lake Huron. *P. humilis* is as far as I know exclusively confined to Ontario.

You have specimens of mine collected at Kingston, Nova Scotia which I named *P. lucida*? but which I am quite sure are *P. nitida*. Please have a look at them. They are quite distinct from *P. lucida* as you draw the lines.

I was struck with the resemblance of my *Lychnis elata* to *Bilene multicaulis* and to make sure examined a flower and found four styles which caused me to make it a *Lychnis* and hence state



5
GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn B.L.D., F.R.S., Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

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Please look at it again as I believe Nuttall's species is a *Lychnis* if mine is like his. ~~as~~ I certainly took them to be the same but the style staggered me. I have splendid specimens of my *Arabis Lyallii* in flower and fruit I will send them so that you may ^{not} decide. The pods are all erect and ^{not} even spreading at maturity.

I am studying out all our various forms and trying to separate the compound species into their component parts and have succeeded very well. I am puzzled however with the *Campestris* group of *Oxytropis* as Dr. Gray in his last Division does not definitely fix our mountain forms as he will see when he gets my parcel. *O. viscidula* is a lovely plant and he will see it as he

says with violet flowers. My plants are in fine condition.

You remember my sending a plant last year named *Astragalus Mortonii*. You said it was *Heedysarum Mackenzii*. This year I have obtained remarkably fine specimens of it and it certainly is a *Heedysarum* but lies between *Mackenzii* and *brevifolius*. Its flowers are always white and in the foothills ~~as~~ it grows with the other two but it is the only one that enters the mountains and ascends to a high altitude. You will see the specimens.

Please excuse this long epistle but as the Revision of the *Polypodiaceae* is now in progress I may as well state a few of the difficulties which come under my observation. Tell Dr. Gray that I have an immense collection of mountain plants in our herbarium ~~that~~ are at his service if he desires to see any of them.

and that any thing which he
wants to verify will be sent him
at once if asked for.

This letter is already
too long and I shall leave the other
notes until I send the specimens.

Please give my congratulations
to Dr. Gray on his approaching birth
day with the hope of many returns.

Very truly yours
John Macoun.



GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn L.L.D., F.R.S., Director.
MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Nov. 28th 1885

My dear Sir.

Please accept my thanks for your last notes and corrections. I hope you will not think me too troublesome but I confess I know I give you much bother. It is done however in the interests of general botany as the more I work at our forms the more I am satisfied there are many mistakes still to be rectified.

I send our western *Calceolatus*. You will notice that it has long, narrow and very acuminate sepals which are always bright blue. I send a specimen could it be *Calceolatus*? It extends to the Pacific from the Cypress Hills. Our eastern form has blunt ^{acute sepals} or scarcely.

The form sent last year as *R. nivalis* V. *trichostema* is sent again both in fruit and flower and *R. nivalis* var. from Henderson Bay. I send a number of *Orabas* this time in good fruit which I hope may be found correct. *Lychnis elata* is sent again under that name as it certainly has four petals. I have a specimen of *A. muticantis*, sent from Sukkloof and I believe it to be a *Lychnis* also and likely my species. I send *Arabis Lyallii* again

Var. *Columbiana*

this time both in fruit and flower. It cannot be *Holboellii*.

I send three *Astragali* which I am in doubt about but as they have both flower and fruit you will likely find them without trouble.

A number of forms of *Oxytropis* are also sent and amongst them *O. viscidula*. The specimens confirm Dr. Gray's opinion about the flowers being blue or purple.

All the specimens sent are named except the *Astragali* and *Oxytropis*. You will notice the *Roses* are named in accordance with your Monographs. The specimen of *Epilobium* which looks like var. *lineare* differs greatly in the seeds which are worthy of examination.

I have now sent all the *Polygalatae* not hitherto forwarded to Dr. Gray and as new material is collected I will keep on with every form we have in his herbarium.

Very truly yours

John Macoun.

P. S. The parcel now sent contains 163 species all named except six. J. M.



GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn L.L.D., F.R.S., Director.
MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Dec. 4th 1885

Dear Dr. Gray,

Your Circular letter dated
Nov. 19th was received today and in
acknowledging its receipt allow me
to personally congratulate you on your
vigorous old age and express the wish
that you may long live to solve the
difficulties of one of your oldest followers
if not a pupil under your immediate
instructions.

Very gratefully yours
John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn LL.D., F.R.S., Director.
MUSEUM & OFFICE, SUSSEX ST OTTAWA.

Jan. 13th 1886

My dear Sir,

Your note and the list of corrections of the *Polyptota* reached me on Saturday. I am glad to find that so many of my determinations were correct. Of course you cannot understand the labor I have to merely reach the vantage ground I have especially in the *Polyptota* where all is still confusion or inaccessible to me.

I am very glad to have added so many things to our flora from last summer's trip and hope that some of my finds are interesting to you. I see no reason to doubt your decisions and shall register all my plants as you determine.

I herewith send the *Garnopetota* which includes as my contributions for this year 169 species or forms. On the top you will find the doubtful things which I would like you to look at as I am very much interested in their determination. Should you

not be able to examine all the parcel now I would
be glad if you could look at those on top.

My collections of Willows, Larices & Grasses
are all worked up and now in the hands of Peck.
Boott & Vasey. There are many interesting things amongst
them. I also found ~~two~~ very rare ferns, *Phegopteris*
alpestris & *Aspidium Orestia* last summer.

I will send all these in my next parcel.
as well as some other things you have not received
from me yet. I have fine specimens of *Cypripedium*
passerinum from the Rocky Mountains.

With many thanks I remain yours
Very truly
John Macoun.



GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn LL.D., F.R.S., Director.
MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Feb. 18th 1886

My dear Sir.

Your card came this morning
And in answer I may state that no
specimens of *R. affinis* var. *leiocarpus* were sent
to you; ~~the~~ from Hudson Strait. Those sent to
you were labelled *R. nivalis* and by Mr. Watson
changed to *R. affinis* var. *leiocarpus*. These specimens
were collected on the Summit of Mount Albert
in the Gaspé Peninsula, August 1882.

I believed the Cape Chudleigh specimens
were the same form and hence sent them to Mr.
Smith. None of my Cape Chudleigh specimens
have rootleaves. After examining all the specimens
I wrote last year as follows — "Heads of fruit oval
and seeds quite smooth, beaks of fruit curved, flowers
bright yellow; calyx and upper part of the pedicel

covered with light ~~yellow~~ colored hairs."

I am very sorry I know nothing of the rootleaves. Mr. Smith's specimens are like my own. No radical leaves were brought back.

I expect to go to England next month where I will remain all summer. I purpose seeing as many of the old collections as possible so as to clear up a number of difficulties that have arisen in my mind.

The third part of my Catalogue is now well under way and in it I intend to put all corrections and additions up to date. For this reason if no other your notes on the Gamopetalis sent lately will be very acceptable.

In your notice of Part II you say that you understand Canada to mean Upper and Lower Canada. These names have not been in use here for 20 years. Lower Canada is now Quebec and Upper Canada is Ontario. Canada now stretches from the Atlantic to the Pacific and includes all north America not included in the United States.

Very truly yours, J. Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn L.L.D., F.R.S., Director.
MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

July 24 1886

Asa Gray Esq. M.D.

Cambridge Mass.

U.S.A.

My dear Sir.

As you are of course aware Sir Joseph Hooker for many years Director of the Royal Botanic Gardens at Kew has recently retired from active official life.

It has been suggested by a few botanists in Canada that some testimonial from the English-speaking people, either in the shape of an engraved address or in a more tangible form would be an appropriate recognition of his services to Science. Before moving in the matter however I have been requested to write and ask if you will allow your name to be mentioned as approving of the project in the Circular which it will be necessary to dispatch to all parts of the world. We shall be glad to receive your views on the subject, as well as any advice you may be pleased to give, as to the

form this mark of appreciation should
take. We do not of course wish to
impose upon you any of the necessary
work in connection with the matter;
but perhaps you could suggest some
person or persons who would be wil-
ling to take an active part in this
movement, as far as the United States
is concerned.

Resping the favour of an early reply

Yours very dear Sir

Yours respectfully

John Macoun



Feb. 25 1886

My dear Sir.

Both your letters, with notes, have reached me and I thank you very much for your goodness in doing the work so promptly.

Please have the Volume containing Parts I-II of the Synoptical Flora sent to our Library and I will have the money sent our receipt of the book. I am anxious to get the book at the earliest possible moment as I wish to conform my Catalogue to it.

I shall send the flowers of *Cynoglossum Virginicum*? in a day or two. I hoped you would make it *C. occidentale*. I compared *Borchnickia Hookeri* with his figure and examined each part under the microscope and decided my plant must be it. I will compare all ^(Canadian) our difficult things with this in Her.

Gentiana puberula and *affinis* bothering me a good deal but I separated them as you found them. I am glad you have straightened that out.

to and active assistance I
am getting our plants in order and hope in
a short time to have all our forms represented
in our collection.

We have a large package of Apetalia
and Endogens put up for you, but they are
not specially to be examined as the Willows, Grasses
and Grasses have passed under the eyes of Prof
Boott & Vasey. When they are being laid in the
Herbarium I would like any corrections Mr. Watson
may make noted down. There is no hurry how-
ever as I do not want the notes until next winter.

Again thanking you for your kind-
ness, I remain yours very truly,

John Maccom.

P. S. Should you desire either specimens or notes regarding
any of our Polyspetata you have only to ask for
them. J. M.



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn LL.D., F.R.S., Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

March 10th 1886.

Dear Dr. Gray.

Your very kind note was received in due time and gave us all much satisfaction. The two points, raised by you, that Sir Joseph Hooker has not given up botanical work and that an engrossed address in the form of testimonial presented to him, meet our hearty approval and we will keep these as our guides in our further proceedings.

Mr. Fletcher, who takes a very active interest in the matter, is now on his way to England and has promised after conversing with Mr. Thwaites (Oyer and Learning his views to communicate with us immediately. We therefore propose on hearing from him to draft a short address which would take the liberty of sending to you for your opinion before it is printed. We could also undertake the general distribution

of the circular to botanists, but would suggest for
your approval the idea of having a separate centre
of distribution and receipt of forms for the United
States, leaving us to deal with Canada, Australasia,
the Cape &c.

Very sincerely yours
John Mawson



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn L.L.D., F.R.S., Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

6th January 1887

My dear Sir.

Please accept my best thanks for your promptness in reporting on the plants I sent down lately and excuse me for troubling you so much.

The various specimens of *Arabis petraea* or *Sisymbrium humile* that I have sent you have always been a puzzle to me and I think from your letter of Dec. 21st I see my way to a clearing up of the matter. Please examine my *Arcticola* and *Pleurostachys* specimens sent as *A. petraea* and see if all are not *S. humile* or the *S. boreale* you think of making. All these specimens are truly annual and are more or less hairy, while *A. petraea* from Lake Superior is certainly perennial and smooth or nearly so.

The plant sent down as *Parrya arctica* evidently grows in some abundance along Hudson Bay as I have an old specimen obtained by Mr. Bell some years ago. My son is going to the Bay



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GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn LL.D., F.R.S., Director.
MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

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the coming summer and will look out for more of it.

While in England I did not meet Mr. Foster or if so have forgotten. Regarding *Tridentata* I may say that in habit it differs from *T. varicolor* in being shorter and stouter and with having the pod shorter and broader. I have always found it ^{on} sand or boggy ground within the influence of the spray from the sea. I believe it ^{to} be a purely coast species. I send the only specimen I have in fruit and hope the seeds may germinate. It was gathered at Gaspé Basin in 1882. I will be west next summer but will try and get our men who may be on the coast next season to send you a box of roots of the sea side Blue Flag. I think I may promise them with safety.

In the first part of my Catalogue I stated that we had possibly three species of *Prunus* on our western plains - *demissa*, *Virginiana* and another.



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It is probable that *P. demissa* extends eastward to ~~near~~ Winnipeg or that we have a bush form with black, sweet fruit that takes its place east of the Rocky Mountains.

I send down a plant with the Iris which was found on a roadside in Manitoba but which I can make nothing of except that I incline to make it an *Acalypha* but only with fear and trembling. It is certainly an introduced plant but where from is a question.

Last spring I put up a bundle of our endogenous plants, including grasses, sedges and ferns which will be forwarded for the herbarium if you so desire. All grasses, canes &c. are properly named and I only send the package to complete our flora as far as possible.

I remain yours truly
Serrano Watson Esq.
Cambridge Mass.
John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn LL.D., F.R.S., Director.
MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

26th Jan. 1887.

My dear Sir

Your card with the names of the plants came in due time and today the one asking for my mounted specimens of *Arabis petraea*. I send all these within a parcel of plants sent today by express. Please return the mounted specimens of *Arabis* when you are done with them.

The plants sent consist chiefly of Larices, Grasses and ferns and contain many rare species. These plants include all my duplicates not hitherto sent. There are a few odders and ends on top, but the Orchids, Liliaceous plants and rushes make up the bulk of those not in the three orders mentioned. All the Cyperaceae, Gramineae & Filices are supposed to be correct and have been named by myself and others.

It is very remarkable about *Caryis amaranthoides*. I believe it is a recent introduction.

introductions as we had no account of it until last season. There are many species of peculiar plants springing up along the new railway that were never seen in the interior before, but which I think are introduced.

The Iris I sent is common from a little below Quebec on the River St. Lawrence along the shores of that river and along the Gulf coasts to the Atlantic. I am quite sure it is a maritime species. Prof. Sargent has all my specimens of *Crataegus* for examination and we are conducting a little correspondence in connection with *Picea* and *Juniperus*.

Hoping you may clear up our difficulties regarding *Arabis petraea*

I remain yours truly
John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

March 17th 1888

My dear Sir,

Your letter came on with the first train so it reached me yesterday. Curiously enough, the storm seemed to have spent its force east and west of us but not here. We were very much surprised to learn of its force in other localities so far south of here.

Please accept my thanks for your trouble in examining and naming the specimens sent. I only sent down those I had doubts about. As I sent the parcel I have only laid aside three or four difficulties. All the Umbelliferae have been named by Prof. Coulter and three new species recorded. The Willows have given Mr. Pitt much satisfaction. Prof. Bailey has been making a more careful examination of our Carices and has sorted out a few new varieties, and Dr. Vasey as usual reports many new grasses.

I am well pleased with the work of the past year. Including all orders I have collected nearly 60 species new to science.



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GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

Is the *Thalictum*, Delar. new species?

Today I have sent 78 grasses to Dr. Vasey
and have many more to send.

I am about to publish Centuries of
Canadian Mosses, Liverworts and Lichens in
a volume of the Catalogue, but Dr. Nils Kindberg
of Norway will describe the new species of mosses
while Mr. Pearson of Manchester England is
monographing the Hepaticae. Prof. Fries has offered
to complete what Prof. Duchesne left undone and
this year's collections on Vancouver Island will
be examined by him. Can a set be purchased
for the herbarium?

Very truly yours
John Macoun

(Dr. Aaron Watson

Herbarium

Cambridge

Mass.



GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

Kanaimo B.C.

July 12th 1887

Dear Doctor Watson.

Your very interesting letter of June 23rd reached here yesterday and was read with much pleasure. I am glad you have finally settled with *Arabis lyrata* & *putraea*. The latter was always a puzzle as I could not make my specimens tally with the description.

My son is this summer assisting in the exploration of ~~for~~ the island in James' Bay - the southern extension of Hudson Bay - and we expect him to make many new discoveries. I have been on this island (Vancouver) since the 16th April and will be here until Sep. 1st. I am making a thorough botanical exploration of the southern half of the island and up to the present have made immense collections and numerous valuable discoveries. In the winter I will send my usual package of this summer's findings and hope to have some species that may interest you.

I will look out for the Oake and indeed will get specimens from Brown's tree as well as from others and hope to settle the question of a second species which I think there is not. As for *Juniperus Virginiana* is the only one here so Prof. Sargent is right. I have discovered *Panga* & *Staurium*.

on a mountain about two miles from here and at an altitude of 3000 feet. I have collected fine specimens of the roses and can settle the question of their occurrence here. *R. Nuttiana* seems to have many forms and seems to approach *R. prinosarpa* only as regards size of flower. *R. gymnocarpa* is a lovely little thing. It came into flower with *R. Nuttiana* about five weeks since. I collected their fruit today, and the flowers of *R. prinosarpa* yesterday. The latter is fully a month later in flowering. One form (?) of *Nuttiana* has small flowers and pear-shaped fruit, while the other has large round fruit.

Two days from now I commence the ascent of Mount Annewsmith 50 miles from here and 6000 feet high. I purpose making a careful examination of it, as fully 1000 feet of it is above the present snow line, and it must have the greater part of the alpine flora of the island on its upper slopes. I am taking an Indian and six days provisions. Deer are abundant so we will be in no fear of starvation. So far I have found the alpine flora almost identical with that of the coast range but hope to get Alaskan forms when I reach higher altitudes.

Up to the present I have noted and collected over 1100 species on the island. Of these 744 are flowering plants & ferns, the others are Cryptogamic of all orders. I have fine specimens of a terrestrial *Noctes* and have found *Phyllospadix Torreyi* or something very like it.
Very truly Yours
John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

17th Oct. 1887

My dear Sir

Since my return from Vancouver Island I have been so busy working at Part IV of my catalogue that I have neglected to answer many letters and I did not write you until I could send you a small parcel of critical species for your opinion. I only send the Orchids and Liliaceae which are new to me. My determinations are on the labels. Please examine them at your earliest convenience and let me know the results as I am writing them up now.

I duly received your letter of July 28th as well as that of the 23rd. I was delighted when I read that the plant you wished me to look for was a myrtle as I had seen nothing resembling what you asked for. I also had another letter asking me to look up Baker's Oak which I have mislaid or lost. I attended to the oak and gathered fruit and leaves from the oak on Sir James Douglas' Lane



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GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

so that you may compare them with those
so obtained in other parts. The oaks I will send
with my usual bundle which this time will include
many rare things for I have made many discoveries
on the Island. I have no time now to go over the
Eoogens but if there are any orders or genera of
which you desire specimens you have only to let
me know and I will send them at once. Wrong,
Britton, Bailey and Vasey will examine their particular
sections and I hope will find much to interest them.

It is very probable that I have *Phyllospadix*
Scouleri in fine fruit as I have one species if not
two and abundance of fruit.

I received both copies of your last Contribution
to our Botanical knowledge and ^{you} have settled my puzzle
about the Rocky Mountain form of *Arabis Drummondii*
and I am glad have cleared up that other about *Arabis*
petraea. The specimens you had of us came back safely.

Please accept my thanks for your last work and remember
me for your future one. Very truly yours
John W. Mearns

Chas. Watson
Harvard University



GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.

MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

31 Oct. /97

a loss what to do with *Trillium erectum* var. *declinatum* Gray. In your revision of the Liliaceae you seem to include this form in *T. cernuum* but you do not mention the fact. Indeed you say nothing about it. After carefully examining our specimens I have come to the conclusion to place it as a var. of *T. cernuum*.

The species grows with us in the valleys of rivers and small brooks while the var. *declinatum* is our most northern form and is never, as far as I am aware, in river bottoms. The peduncle is only declined in the var. while it is curved in the species. Please look at the specimens of my *T. erectum* var. *declinatum* in the Herb. and ~~tell~~ ^{ask} me what you think?

I had the good fortune to collect *Phyllospadix scabra* in fine fruit the past year and also *Lilium subulatum*. In cases I have added a few things and a couple of species unknown to Mr. Bailey. When I begin to work up the general collection I expect to discover many interesting things. Mr. Morong has seen the *Raiadaceae*.

Dr. Lorenzo Watson
Cambridge
Mass.

Very truly yours
John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

Nov. 11th 1887

Dear Dr. Watson,

Your note of the 4th inst has been received and in accordance with it I have retained *D. erectum* var. *declivatum* under *D. erectum* as of old.

I have just completed working up the junco for the Catalogue and send you my determinations of the Vancouver Island ones. I would like to have your opinion as soon as convenient.

In the same parcel I send over a dozen species of which I would ask a critical examination. I am sure some of them will interest you as they are very rare even if my determinations are correct. The leardanine with the heart-shaped lobe at the end of the leaf is new to me and so is the *Claytonia* which is different from anything hitherto seen by me. As I work up the collections I will send down the difficulties but later in the winter we will send our usual packet.



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GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

Before spring we will send you down another parcel but there will be only a few for you to examine critically. There I will indicate.

The *Pisidium* is very likely introduced as I obtained it in two places and in both it could have been introduced.

I think you should make two varieties of *Boeckmannia occidentalis* and two of *Picrella bifoliata* as the two forms of each are quite distinct in habit and general appearance when growing.

Wishing you a prosperous summer and that the fates may allow me to meet you next year

I remain

Dr. S. Watson
Herbarium
Cambridge
Mass.

Very sincerely yours
John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

April 27^{*} 1883

Dear Prof. Watson

I have today received Dr. Gray's last contributions. Please accept my thanks for the kind remembrance.

Part IV is nearly completed and will surprise you on account of its size - nearly 250 pages. It includes all the Endogens and all we know about them.

I will take the field very soon but will do little in Phenogams this year as my time will be taken up with other branches of Natural History.

Hoping you have stood the winter without injury and that the summer may end with you in perfect health

I remain truly yours
John Macoun

P. S. I suppose I should thank you for a copy of the Life and Work of Prof. Gray.
J.M.

Macdon



GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

June 13th 1888

My dear Sir

I have this morning received your last contributions to American botany and have examined with great interest your remarks on the various species of *Lesquerella* and *Oraba*.

You may not be aware that Pursh botanized on Anticosti. I have no doubt but he found *L. arctica* var. *Purshii* exactly where I found it.

By putting *O. arabisans* as a var. of *incana* you have done a proper thing and by erecting *O. incana* var.

borealis into a species you have done what our northern forms required to be done.

Next autumn on my return from the field I will have a complete examination of my immense collections on the basis of your revision, and let you know the results.

My son is now collecting north of Lat 56 and about 110 west. I leave in four days for Prince Edward Island where I will collect all summer.

Please accept my thanks and believe me to be

P. O. Part IV is
written and nearly
printed

Very truly yours
John Macoun



No. 207

GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Schwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST. OTTAWA.

Sept. 16th 1889

Dear Mr. Watson

Your note of August 28th came in due time and should have been answered before this only I have been moving about from place to place. I am happy to say that my health is completely restored so that I can go to work again with my old time zest.

The fourth Century of my Canadian Mosses will be ready for distribution shortly and I will send at the same time the three already published. Hindberg has been at work on my mosses for nearly two years. So far (leaving out this year's collections) he has enumerated 608 Canadian species and describes 47 new species and 33 new varieties, also credits me with 46 other species not described in Jarnes & Lagerman's Manual. I have the manuscript of Pearson's enumerations of the Canadian Lichens (167 species) now in the hands of the printer. He only makes one new species but we are publishing 1613 plates of new drawings of imperfectly characterized species. After this is far enough advanced I will

send to the printer Hinsley's complete notes and descriptions of new forms and hope to have both ready for distribution in spring. All those getting my sets of mosses will get printed descriptions of the new forms I distribute besides the pamphlet which will contain besides Hepaticae and Musci, additions to the four parts of the Catalogue already published. This will be my work for the winter.

Owing the summer I made very extensive collections and before spring hope to send you down a large parcel of the collections of the last ~~last~~ ^{three} seasons. Our work has increased so much of late that my son and myself can scarcely keep up with the routine work let alone the work of distribution.

I added no new forms of mosses this season but can send you when you desire a very good set of all our northern forms as we have them now from the Atlantic to the Pacific.

In 1887 I collected on Vancouver Island, last year on Prince Edward Island and this year from the coast of British Columbia eastward to the Columbia, so you see I have specimens from much new territory. Will you want the Hepaticae as well as the Mosses?

Chas. D. Watson
Hawarden, Missouri

Very truly yours
John Macoun

No. 318



GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST. OTTAWA.

Sept. 26th 1889

Dear Dr. Watson

Your note of the 19th inst. reached me safely. Thanks for your preaching but it is impossible to "go slow" as I have so much on hand. We are beginning to work up last year's collections and so we reach anything not ~~yet~~ hitherto sent to you we will put it and others aside.

Today I send four Centuries of Mooses to your address and include the last one before the tickets are printed but there will be sent down in a few days. One number of the first Century is wanting and three of the second. I send the tickets and keep a note of the numbers. I will have another Century next year. I send on top of the parcel an Arabic, two Cardamines and a Nasturtium that I would be glad to have your opinion upon. I sent down a Calceolaria of the collections of 1887

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which you never determined. Could you
look it up?

Whenever you want any material
for any order I will send down our
mounted specimens so that you may see
them and ~~of~~ compare with others.

The mooses are corrected up to date
and the descriptions of all the new forms
will be sent down in duplicate when
printed which will be this winter.

Very truly yours
John Macoun

Dr. L. Watson

Harvard Herbarium

Cambridge

Mass.

P. S. I would like to see the new Manual as soon as issued
if it is coming out this winter as I am publishing an
addendum to my Catalogue. J. M. a



GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

OCT 11th 1889

Dear Mr. Watson

I herewith send you the balance of the tickets for Century IV. You will notice that a number of the new species are amongst those sent especially at the end of the last Century. I propose after this to distribute in dozen packets as I get them complete. I will issue them at a dollar per dozen and will send the first to you as soon as complete. These will include many rare and new species and varieties.

Very truly yours
John Macoun



GEOLOGICAL & NATURAL HISTORY SURVEY,
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX ST., OTTAWA.

Oca. 16th 1889

Dear Dr. Watson

The cheque has just reached me and
I hasten to acknowledge it.

During the winter we will send down
any species we may have obtained the past summer
in addition to those already sent besides
any difficulties I may meet with. As soon
as I reach the River I will send to you those
obtained in 1887, 88 & 89 together with all
my son has laid aside for you in the
meantime.

Very truly yours
John Macoun

Oct 11/09



No. 395

GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn M.G., LL.D., F.R.S., Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Nov. 22nd 1889

Dear Dr. Watson

Today we send down a small parcel containing the Roses and a few other plants either heretofore sent to you or critically interesting.

My son has mentioned that we desire information about you will notice that there are three *Astragali* and a *Stellaria* as well as two forms of *Spheralcea*.

The three common roses of the west coast are *R. Nutkana*, *pisocarpa* & *gymnocarpa*, I name the typical forms and send the others numbers. Enclosed find Nos. 123¹³⁴ & 139 not represented in your set of the Canadian mosses.

I am working steadily at our collections of last year and have already made some discoveries in phenogams and added over 20 new species of mosses to North America.

Dr. Samuel Watson
Cambridge
Mass.

Very truly yours
John Macoun

over 100



No. 447

GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Jan. 3^d 1890

Dear Dr. Watson

Your card came today. In answer I may say that the "Mountains of Cariboo" are in northern British Columbia between Lat. 53° - 54° . This is the "Gold Region" of British Columbia and received its name from them on account of the Caribou in the mountains.

Last summer I was on the "Gold Range" west of the Columbia River and north of the Canadian Pacific Railway and saw numerous Caribou and Rocky Mountain goats. About 6500 feet above the sea the timber ceases and fine meadow tops there place up to perpetual snow. I spent ten days on the mountains and brought back Goat skins with me.

In the last bundle of plants there are a few different forms from this very region. Please look at the Poltonia in the bundle sent and let me know what it is. With my very best compliments of the season

Dr. Azar Watson
Cambridge Mass.

I remain yours truly
John Macoun

June 3/90



No. 467

GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn, C.M.G., I.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Jan. 17th 1890

Dear Mr. Watson

Your kind letter with notes reached me a few days since and I thank you very much for them. I am glad to hear your explanation about S. calycanthus. S. borealis should be better described. I am glad you made the Astragalus lentiginosus and I A. Beckwithii as that was what you named it in 1876, while I was at Harvard. The Rubus I name leucodermis & strigosus was growing with them and was evidently a hybrid. S. Oreganus was a mistake for S. Nuttallii as I remember when you changed the name of the western venosus. I will try and get fruit of my Lupinus lasioflorus next summer as I am going to British Columbia in spring. Gissa borealis was Britton's name. Last winter he asked me for all my forms of Spergularia and I sent him down the mounted series. He was working up the whole genus for publication. When he sent the specimens back the name was



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.

MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

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on the sheet without any author's name after it.
The Rows numbers 1-4 are as you say forms of *R. pizocarpa* in my opinion but they differ in this point - the flowers grow singly - I never saw one *pizocarpa* in its native habitat with single rows in every case they grew in bunches. If that is a character of *R. pizocarpa* it holds good both on Vancouver Island and British Columbia.

Epilobium wants revision very badly. I have a number of forms I can do little with. Coulter & Rose have examined our *leucurus stolonifera* and *pubescens*. Out of the prairie forms they make a new species *E. Baileyi*. No new *umbelliferus* this year. *Scirpus* has all my grasses of last season now under consideration. Coulter & Rose have examined many of Hirtberg's new species and confirmed the greater part and made other new ones.

Very sincerely yours
John Macoun

Ca. Lerano Watson
Cambridge
Mass.



No 540

GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn, C.M.G., I.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Feb. 20th 1890.

Dear Doctor Watson

The "New Manual" has reached me, I have only looked through a little of it and am much pleased with it. I find I can recommend it to our people in Manitoba as nearly all our north western plants are in it.

In a few days I will write again regarding it as I am intending to go over it carefully and change the synonymy of my Catalogue to agree with it.

Thanking you very much for your kind remembrance I remain yours

Very truly
John Macoun

Feb. 20/90



No 606

GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

March 24th 1890

My dear Sir,

Your note of the 21st inst. came this morning. I am very glad to hear that M. Bailey is interested in general botany and I will at once communicate with him. We have many duplicates of our western species and wish to have them placed in good hands.

I am quite sure you are right in making the *Ruppiea* a new species. I would be glad if you would describe it and send me the descriptions for Part V which is now going through the press. I would be very thankful for the names of the plants sent you some time since as I wish to insert them in their proper place in the addendum.

Dr. Brewster Watson
Cambridge
Mass.

Very truly yours
John Macoun

Apr. 1/90



No 613

GEOLOGICAL & NATURAL HISTORY SURVEY.
Alfred R. C. Selwyn, C.M.G., LL.D., F.R.S., Director.
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

April 1st 1890.

Dear Mr. Watson

Your letter of the 28th March has been received and read with much interest. I have made the necessary corrections and completed I may say my winter's work. Willows, Carices, & grasses of the prairie & nears were very interesting and have been examined by Robt. Bailey & Scribner. DeCane has the *Epilobium* and says they are very interesting.

We send you by this mail about one hundred additional species, many of which are interesting. The Umbellifers were all examined by Coulter & Rare so that they are all reliable. On the top of the bundle are two specimens which I have named but which I would like you to look at carefully. They are forms I am not altogether satisfied with. No 10 always grows on mountain's summits. No 7 is a puzzle. Is no 5 *O. Missouriensis*. I call no 4 *S. foliolosa*, R. Brown. No 2, 1-2 may be correct but I am doubtful of them.



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn, C.M.G., L.L.D., F.R.S., Director.

MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

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P. S. My second daughter marries a Purton peritum.
it is a couple of weeks so you may see me next fall.

I am very glad I have reached the type
of Erythronium grandiflorum Pursh. It is a lovely
thing and well worthy of cultivation.

I start for the field on the 20th
of this month. My field of operations is between
the two arms of the Columbia or what we call
the Rivertanic District. It is a very interesting
region being the home of many rare forms. Snow
clad mountain tops, deep valleys, forest regions
dry grassy slopes, sparsely timbered and prairie
flats make up a very mixed flora.

This year I collect all kind of Natural
History specimens but must get many good
things in Botany as we have never collected
there. Should you desire me to look for any-
thing your specially desire let me know.

Chas. D. Watson
Cambridge
Mass.

Very sincerely yours
John Macoun

1. *Trox. aurea* - fls. purple, but not var. *purpurea*
 2. *Saxifraga occidentalis*, Watson
 3. " *reflexa*, Hook
 4. " *linearis* - Hemigolia, Mex. - not considered
 5. *Opuntia missouriensis*, DC
 6. *Aster occidentalis*, Nutt
 7. *Erigeron uniflorus* - few-rayed form. Can it be *E. alpinus*
not *E. alpinus*
 8. *Trillium grandiflorum*
 9. *Ranunculus* - not *R. repens* - not *R. abortivus* - can it be a
form of *R. abortivus*, or *R. abortivus*
 10. *Potamogeton griffithii* ? - intermediate between it & *P. palmatus*
-
- Oen. bicoloris* - not var. *linearis*

Belleville

May 30th 1880

My Dear Sir,

I start for Winnipeg tomorrow and shall be absent until winter.

Should either yourself or Dr. Gray desire any special examinations - of certain orders made communicate with me at Winnipeg and they shall be attended to.

On my return I shall fix up many of the blanks in furnishing Dr. Gray with a complete set of Canadian plants.

My route this year is south of that of last year and not so far west. I shall carefully examine the Cypress Hills.

Very truly yours
J. Macoun

P. S. Thanks for the change
of name. I am delighted to
know that Mr. Gray is working
up the Composite.

Please make a note of
all the corrections made on my
contributions.

J. M.

No 831

GEOLOGICAL SURVEY DEPARTMENT.

Alfred R. C. Selwyn, C. M. S., L. L. D., F. R. S.,

DEPUTY HEAD AND DIRECTOR,

MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Oct. 22nd 1890

My dear Sir

Some time since I received No XVII of your Contributions to American Botany and now tender my hearty thanks for your kind remembrance. I notice that you describe in part the new *Puffia* I found last year. I also described it in part in Part V as *P. laevis* but this is still in the printer's hands. You do not mention the *Arabis* which I thought was *arcuata*. I believe it to be new also.

We gathered many fine things the past summer in the British Columbian Mountains. Some of these are new to our flora and some may be new to science. As soon as my son gets through the *Polypetalae* we will send you those that are doubtful and others not hitherto sent to your herbarium. I have often wondered whether you ever distribute any species from Harvard. We got specimens from everywhere else but none from you.

GEOLOGICAL SURVEY DEPARTMENT.

Alfred R. C. Selwyn, C. M. L., L. L. D., F. R. S.,

DEPUTY HEAD AND DIRECTOR,

MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

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I am not asking for an exchange but you may have species to distribute in our Herbariums.

There are many new species of mosses in Canada yet to be collected and described. Hindberg & C. Müller have been at work on my collections the past summer and have worked out 171 species new to science. Prof. Barnes seems to think these of little account but he will open his eyes wide when he sees the descriptions and I hope in many cases the figures. When all are examined there will be fully 200 additions to Desq. & James Mammal as I have over 25 new to America though not to science.

With best wishes

I remain very truly yours
John Mawson

Erano Watson Esq.
Cambridge
Mass.

GEOLOGICAL SURVEY DEPARTMENT.

Alfred R. C. Selwyn, C. M. G., L. L. D., F. R. S.,

DEPUTY HEAD AND DIRECTOR,

MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Nov. 27th 1890

Dear Dr. Watson

Today my son sends a parcel of plants part of which are referred to in a list which he sends. Would you kindly look over these and let us know your opinion as soon as convenient.

I want particularly your opinion on my forms of *P. occidentalis*. *Aquilegia flavescens* (6) I consider a new variety at least. *Papaver nudicaule* is certainly not the *P. nudicaule* of the Arctic regions. The *Arabis*? (No 19) is beyond me. I believe it to be a *Sisymbrium* near *S. humile* but ^{not} that species.

You have an *Astragalus* of mine which I sent in 1885 that you named *A. alpinus* but I cannot agree with you. I now send the same species as No 26.

Have you not two species of *Lasiopaga* from me under the name of *S. occidentalis*. The one I send now (No 36) is surely Green's *S. californica* and your *S. occidentalis* is the species with the ferruginous tomentum under the leaf sent in 1883.

GEOLOGICAL SURVEY DEPARTMENT.
Alfred R. C. Selwyn, C. M. G., LL. D., F. R. S.,
DEPUTY HEAD AND DIRECTOR,
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

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Many of our northern forms do not seem to be identical with the species which pass for them south of Lat. 42° . Where are the types of Dorey and Gray's Flaa and Nuttall's species? I am becoming satisfied that many of the old names will have to be revived as we have in our collections now many forms that will not fit in with many of the descriptions published in the last 30 years. If you have the types I mention I may go down to Harvard for a couple of weeks next February and with your help work over some of our difficulties.

Very truly yours
John Macoun.

Dr. Arano Watson
Cambridge

Mass
P. S. I have a married daughter living in Boston now.
J. M.



GEOLOGICAL & NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn M.A., LL.D., F.R.S., Director.

MUSEUM & OFFICE, SUSSEX ST. OTTAWA.

Dec. 11th 1890

Dear Dr. Watson

Your kind note and the corrections of the list of specimens have been received and carefully read and the specimens compared. I now recognize Astragalus Robbinsii var. occidentalis and see that some of my Rocky Mountain specimens of 1885 were referred to A. affinis. I thought the Arabis? was Sisymbrium humile. I am glad you made it so. The Silene deserves my name as it has given me much trouble. As soon as my son gets through the Gnomopetalum he will send you another batch of specimens as we have some additions to that section this year.

We have the fruit of the new Rupispraea this year. You will get that also.

With many thanks for your kindness, I remain sincerely yours,

John Macoun

Dr. Berard Watson
Cambridge
Mass.

Dec. 11/92

GEOLOGICAL SURVEY DEPARTMENT.
Alfred R. C. Selwyn, C. M. G., L. L. D., F. R. S.,
DEPUTY HEAD AND DIRECTOR,
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Dec. 18th 1890

Dear Dr. Watson

Today my son sends you a few specimens and amongst them that new *Ruppia*. You will see at least one fruit on each sheet. There are two *Crigerons* that I cannot place, especially the one without rays.

I have taken advantage of my son sending the parcel to forward Century ✓ of the Canadian Musci. There are a large number of new species in this Century and many very interesting things. When I complete my Catalogue of the Mosses there will be numerous changes in the names on the tickets of the Musci. A number of these have become new species whose descriptions will be sent to the Subscribers with the new tickets.

Dr. Warming has examined nearly all my *Sphagna* and when complete I will re-issue the first 15 numbers of my first Century.

Dr. Arano Watson
Cambridge
Mass.

Very truly yours
John Macoun

Dec. 1890

No 894

GEOLOGICAL SURVEY DEPARTMENT.
Alfred R. C. Selwyn, C. M. G., L. L. D., F. R. S.,
DEPUTY HEAD AND DIRECTOR,
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Dec. 29th 1890

Dear Dr. Watson

I am in receipt of both your letters and thank you very much for the notes on the species sent down for identification.

I am glad my *Erigeron* turned out a rare thing. It was too young for me to make anything of it. *Arenaria biflora* has puzzled me very much but now we have a better understanding of it. If the *Arabis Macounii* is the same as the one sent last year collected at ~~La~~ Lytton B. C. I have named it already *A. columbiana*. See Part V page 304.

Your name for the *Rupisia* must be the one to stand as my pamphlet did not appear until long after yours appeared. It was printed in March but not published until November.

GEOLOGICAL SURVEY DEPARTMENT.
Alfred R. C. Schwyn, C. M. G., LL. D., F. R. S.,
DEPUTY HEAD AND DIRECTOR,
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

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I send the tickets for the missing ones except ~~from~~^{one} not printed yet.

As soon as I can get the tickets printed I will send down a new set for the sphagni and in most cases new specimens. Herr Warnstorf has examined all my Sphagni and I desire my subscribers to have sets according to his determinations..

As I have twentyfive species put up as the sixth Century I send them now as you may desire to see them as many of them are new.

Wishing you a happy New Year and many returns. I remain truly yours

Dr. S. Watson
Cambridge
Mass.

John Macoun

P. S. No money until all are sent.

No. 904

GEOLOGICAL SURVEY DEPARTMENT.

Alfred R. C. Schuyler, C. M. G., LL. D., F. R. S.

DEPUTY HEAD AND DIRECTOR,

MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Jan. 3rd 1891

Dear Doctor Watson

I have your notes of the 3^d & 6th insts.

My *Arabis columbiana* was collected at Lythor
B. C. April 16th or 17th 1889 and was labelled A.
Howeellii. You are quite right the specimen from
Rivestote is distinct. Please name it A. Macounii if
you can do so with propriety.

We have a remarkably large *Vicia Canina*
var. *longipes* from Nanaimo which is quite close
to Oupasture Bay but it is not like a specimen
of V. Howeellii which we have from Washington. The
specimens referred to were sent to you if I mistole.
They were labelled Nanaimo if you had them.

I hope to be in Boston for a week after
the 15th of next month and I will spend some
time, or all I have to spare, at Cambridge in
the Herbarium.

Dr. S. Watson
Cambridge
Mass.

Very sincerely yours
John Macoun

The Arabis from Lythor
was sent as A. areolata
I think. gmm.

Aug 1971

No 1011

GEOLOGICAL SURVEY DEPARTMENT.

Alfred R. C. Schuyler, C. M. G., L. L. D., F. R. S.,

DEPUTY HEAD AND DIRECTOR,

MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

April 7th 1891

Dear Mr. Watson

Your card of the 2nd inst. has been here for a day or two. You ask what the "Nasturtium amphibium" of my catalogue is well I answer it is certainly not N. amphibium of Europe and hence is not what I named it. My N. amphibium is the tall perennial plant growing in ditches and with dissected leaves below the surface of the water.

My idea of the real N. palustre is the one with annual root a reclined and branching stem and lengthened pods. It corresponds with N. palustre of Europe. I cannot believe that all the specimens in our herbarium or all I sent you can be referred to N. palustre. We have at least three distinct forms and perhaps four. I do hope you may separate them as I am quite sure they ought to be separated.

Very truly yours
John Macoun

Mr. S. Watson
Hewitt Herbarium
Cambridge, Mass.

P. S. Would you kindly look at the few doubtful plants in the last two parcels, at your convenience, as we are finishing up our winter work. J. M.

Apr. 7/91

No. 1043

GEOLOGICAL SURVEY DEPARTMENT.

Alfred R. C. Selwyn, C. M. G., LL. D., F. R. S.,

DEPUTY HEAD AND DIRECTOR,

MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

April 24th 1891

Dear Mr. Watson

I send to-day all my Nasturtium palustre and the few specimens I at first thought were R. amphibium. You will notice the specimens from North Sydney, this one is introduced. One from Casselman Ont. is indigenous and I believe is true N. palustre. The others cannot be all this species as they are altogether too diverse in all respects. I am sure it is not an easy task to separate them but if they are not different species they certainly are distinct forms never coming to the weak and inclined European form.

I also send all my specimens of Cardamine hirsuta and its related forms. I am quite sure that here too there is a mixture of forms that sooner or later will be separated. The specimens of Arabis and Crab you have seen and I believe have set right.

Very truly yours
John Mawson

2

1871-1872

GEOLOGICAL SURVEY DEPARTMENT.

Alfred R. C. Selwyn, C. M. E., L. L. D., F. R. S.,

DEPUTY HEAD AND DIRECTOR,

MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Barff August 14th 1891
Rocky Mountain Park.

Dear Mr. Watson

Your letter was forwarded to me here and
I thank you much for your information.

I have made extensive collections here this
year but have nothing new as far as I can see
but I have secured fine specimens of *Arabis (Purshiana)*
both in flower and fruit. The latter at 6900 feet altitude
the former at 8500 feet. Both obtained the same day.
It is a remarkably fine species and quite distinct
from the eastern *A. confinis*. I think I have a
small *Parnassia* not found before in our mountains.

My son is with Dr. Dawson at Unalakleet
and the Pribiloff Islands in Behring's Sea this year
and I expect a number of northern things from his
collections when he returns. He is a famous collector
so I expect some additions to the flora of these islands
when he gets back. I will be home in a month.

Very truly yours
John Macoun

1860

GEOLOGICAL SURVEY DEPARTMENT.
Alfred R. C. Selwyn, C. M. E., L. L. D., F. R. S.,
DEPUTY HEAD AND DIRECTOR,
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA,

Sept. 11th 1891

Dear Dr. Watson

I reached home a few days since and found your latest contribution to American Botany on my table. The two new species will clear the horizon on these lines and I hope you may get material enough before another year to make a settlement of Nasturtium palustre. I am quite sure you will get out at least two good species.

I am very glad you have taken up the Erythronium and will concede your correctness without examination. Later I will compare our specimens with your descriptions.

I learned this year that the summit of the Rocky Mountains is really a dividing line between farther floras at any rate. My son writes that he had made fine collections on Unalakleet and hopes to collect on the Pribyloff and Commander Islands besides on some of the most western Aleutian Islands. He will get some good things as he is a see-er. Very truly yours
John Macoun

GEOLOGICAL SURVEY DEPARTMENT.
Alfred R. C. Schuchert, C. M. G., L. L. D., D. R. S.,
DEPUTY HEAD AND DIRECTOR,
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Oct. 15th 1891

Dear Dr. Watson

Your very interesting letter and the pressed
of plants came in due time. I am very glad you
went over all the *Nasturtiums* and the *Cardamines*.
Your determinations I will stand by as I have
every confidence in your ability to discriminate
between different forms. I am going to have what
I thought was a perennial form of *N. prolatum*
grown from seed to see if there is any difference
between it and the annual form.

I remember the type of *Cardamine hirsuta* as
you describe it in the *Mammal*. I gathered it many years
ago at Rainy Lake. I am glad to learn that the
Nanaimo specimen is an additional species to our
list. It could easily have come from behind as Nanaimo
is a coaling port for nearly all Pacific coast steamers.

I have two letters from my son in which he
states he has made extensive collections on many islands
in Behring's Sea. His collections will be very interesting
and it is very probable I will go down to Howard
to work them up as you have doubtless most

GEOLOGICAL SURVEY DEPARTMENT.
Alfred R. C. Selwyn, C. M. G., L. L. D., F. R. S.,
DEPUTY HEAD AND DIRECTOR,
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

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of the species he has got. Amongst others he has nearly all the species that grow on Behring's Island. He obtained these from a Russian. He was told that Dr. Gray enumerated the plants of this island many years ago. Do you know in what publication the list appeared?

My son will be home in four days and as soon as I look over the material I will let you know the more interesting points. Of course you will come in for your share of the specimens brought home.

Thanking you very much for your notes I remain Very truly yours
John Macoun

GEOLOGICAL SURVEY DEPARTMENT.

Alfred R. C. Selwyn, C. M. G., L. L. D., F. R. S.,

DEPUTY HEAD AND DIRECTOR,

MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Nov. 26th 1891

Dear Dr. Watson

Some days since my son addressed
a parcel to you containing a set of our
Hepaticae which I am just issuing. I enclosed
you will find the list.

Please take a look at Lorineua parviflora.
Dr. Gray described Dr. Lindley's L. Couplandii
but I think he was wrong in doing so. I am
sure you have specimens of mine which Dr. Gray
referred to L. hirsuta which are not that species.
I have lovely specimens collected this year that belong
to the var. β of Dow. & Gray and that can be neither
L. planca nor L. hirsuta.

I send a copy of Pearson's List to go
with the set of Hepaticae as many numbers of the packets
refer to his List.

Very truly yours
John Macoun

1-3, 10, 12, 14, 15, 17, 18, 21, 30, 34,

50, 51, 53, 54, 56, 59, 62, 67, 75, 77, 85, 92, 96

106, 110, 117, 118, 120, 122, 124, 128, 131, 132, 134, 136,

149, 156, 157, 159, 161-163,

= 45 numbers

(10, 14, 15, 131

30, 34

50

51, 52, 54, 62, 75, 85, 106, 120, 124, 132

59

67, 92, 121, 122

96

128

? 156, 157, 159, 161, 163.)

29, not Maccom.

Alaska, Komer

Delaware

Lyall

Greenland

Tongue

Drummond

Lyall, Greenland

San Juan Island

"Canada", J. Underwood & Austin.

GEOLOGICAL SURVEY DEPARTMENT.
Alfred R. C. Selwyn, C. M. G., LL. D., F. R. S.,
DEPUTY HEAD AND DIRECTOR,
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

Jan. 3^d 1892

My dear Sir

Your note came yesterday when we were holding high carnival but today things are quiet and we are back to work.

Regarding the specimen from Ouse's Lake I may say that I know nothing further regarding it than appeared or should have appeared on the list. From some cause I failed to put a notice of it in Part ✓ of my Catalogue, and that is not all for I have another specimen from Fort Churchill that was gathered in 1884. No. 12 the specimen to which you refer was obtained at Ouse's Lake Lat 59° and hence a mountain or boreal species - not Arctic. Besides I have a specimen gathered at the mouth of the Mackenzie the first year that may throw some light on the subject. For years Dr. Watson and myself kept up a correspondence regarding a *Lychnis* I gathered on the Rocky Mountains, which he finally named *L. Macounii*. I would like to draw your attention to ^a fact well known to me that botanists

GEOLOGICAL SURVEY DEPARTMENT.
Alfred R. C. Schuchert, C. M. G., LL. D., F. R. S.,
DEPUTY HEAD AND DIRECTOR,
MUSEUM AND OFFICE, SUSSEX STREET, OTTAWA.

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on your side of the line have been in the habit
of giving a name belonging to a northern plant
to a form of that genus collected in the south and
in course of time the northern form becomes almost
unknown and the southern one retains the name
with a new description. Many of Michaux and
Pursh's species have been treated this way and only
a few have been set right. Owing to the broadness
of my work I have no time to give to this but I am
well aware of the lumping and confusion that exists.

I am not acquainted with L. affinis R. Br.
but referred my specimens to it as they were unlike
L. triflora from Greenland. I now think that the
Fort Churchill and Mackenzie River specimens are
different from that from Cease River and that there
are three forms (1) Greenland (2) Churchill & Mackenzie River
and (3) Cease River. I send the specimens down.

Cease River has rocky banks and the specimens
were procured east of mouth of the lake and west of the Rocky
Mountains, which here are poorly defined. Alt. 2500 feet.
B. L. Robinson Ph. C.
Herbarium
Cambridge Mass.

Very truly yours
John Macoun